

**Claims:**

1. A computer system comprising:

first and second processes residing on first and second computers,  
respectively, the first and second processes being used with at least one of a backup  
5 and/or restore operation, wherein each of said first and said second computers are in  
communication with a data storage system which stores data from at least said first and  
second computers and a network;

at least one first communication mechanism residing on each of said first and  
second computers for facilitating communications between said first and second  
10 processes over said network;

a second communication mechanism residing on each of said first and  
second computers for facilitating communication between said first and second processes  
through said data storage system; and

means, within said first and second processes, for allowing said first and  
15 second processes to determine whether a communication to be facilitated between said  
first and second processes is from the first communication mechanism or the second  
communication mechanism and, in response to determining that a communication is  
from said first communication mechanism, facilitating the communication between the  
first process and the second process over said network, and, in response to determining  
20 that a communication is from said second communication mechanism, facilitating the  
communication between the first process and the second process through said data  
storage system.

2. The system of claim 1, wherein said first and second processes are part of  
a backup or restore process.

25 3. The system of claim 2, wherein said at least one first communication  
mechanism is a network socket.

4. The system of claim 3, wherein said communication mechanism is a data storage system socket, and said data storage system socket allows information to be transferred from said first process to said second process through said data storage system.

5 5. The system of Claim 1, wherein said backup and/or restore operation is capable of backing up and/or restoring information from file system or database applications.

6. A method for assisting with backup and/or restore operation in a computer system, the method comprising:

10 (a) establishing at least one first connection over a network, between first and second processes that are each used with at least one of a backup and/or restore operation and that are each residing on different computers, wherein said first connection is configured to be responsively used for communication over a network; and

15 (b) establishing, in parallel with establishing said at least one first connection, a second connection, through a data storage system, between said first and said second processes, wherein said second connection is configured to be responsively used for communication over said data storage system.

20 7. The method of claim 6, wherein step (a) comprises the step of: creating a first pair of communication mechanisms on a designated port of each of said different computers, wherein said first pair includes a first communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers.

25 8. The method of claim 7, wherein step (a) further comprises the steps of: requesting, with said first communication mechanism of said communication mechanism pair, a connection to said second communication mechanism of said communication mechanism pair; and

in response to said connection request, accepting said connection request.

9. The method of claim 8, wherein step (a) further comprises the step of:

creating a second pair of communication mechanisms on the designated port of each of said different computers, wherein said second pair includes a first  
5 communication mechanism on said designated port of one computer of said different computers and a second communication mechanism on said designated port of another computer of said different computers and wherein said second pair of communication mechanisms is used for transferring a different type of information than would be transferred over said first pair of communication mechanisms.

10. The method of claim 9, wherein step (a) further comprises the steps of:

requesting with said first communication mechanism of said second pair of communication mechanisms, a connection to said second communication mechanism of said second pair of communication mechanisms; and in response to said connection request, accepting said connection request.

11. The method of claim 10, wherein step (b) comprises the steps of:

creating a third pair of communication mechanisms on a second designated port, wherein said third pair includes a first communication mechanism and a second communication mechanism.

12. The method of claim 11, wherein step (b) further comprises the steps of:

20 requesting with said first communication mechanism of said third pair of communications mechanisms a connection to said second communication mechanism of said second pair of communications mechanisms; and

in response to said connection request, accepting said connection request.

13. The method of claim 12, wherein step (b) further comprises the steps of:

25 receiving information about a group of resources in said data storage system;

in response to receiving information about said group of resources, creating a fourth pair of communication mechanism, wherein said fourth pair includes a first communication mechanism and a second communication mechanism; and

connecting said first communication mechanism and said second  
5 communication mechanism of said fourth pair of communication mechanism to each other through said data storage system.

14. The method of claim 6, wherein said backup and/or restore operation is for backing up and restoring information from a file system application.

15. A method for assisting with a backup and/or restore operation in a  
10 computer system, the method comprising:

establishing a connection, over a network, between a first process and a second process that are each used with a backup and/or restore operation and that are each residing on different computers;

receiving information about a dynamically created communication  
15 mechanism over the established connection;

establishing a second connection over the network, on the dynamically created communication mechanism, between said first and second processes;

identifying resources on a data storage system to be used in order to transfer  
20 information through said data storage system; and

establishing a connection between said first and second processes through said data storage system.

16. The method of claim 15, wherein said backup and/or restore operation is  
25 used in conjunction with a database application.

17. A computer system comprising:

a first computer having a first process residing thereon and a second  
computer having a second process residing thereon; the first and second processes  
30 including at least one of a backup and/or restore operation;

a first communication mechanism residing on each of the first and second

computers for facilitating communications between the first and second processes over a network; and

- 5 a second communication mechanism residing on each of the first and second computers for facilitating communications between the first and second processes through a data storage system;
- wherein the first and second processes are configured to determine from which of the first communication mechanism and the second communication mechanism communications between the first and second processes originate; and
- 10 wherein a communication that originates from the first communication mechanism is transmitted between the first and second processes over the network and a communication that originates from the second communication mechanism is transmitted between the first and second processes through the data storage system.

18. The system of claim 17, wherein said at least one first
- 15 communication mechanism is a network socket.

19. The system of claim 18, wherein said second communication mechanism is a data storage system socket, and said data storage system socket allows information to be transferred from said first process to said second process through said data storage
- 20 system.

20. The system of claim 17, wherein said backup and/or restore operation is capable of backing up and restoring information from file system or database applications.